

U.S. Patent Appln. Ser. No. 10/625,605

Submission Under 37 C.F.R. § 1.114 Responsive to Final Rejection dated April 17, 2007

Attorney Docket No. 60783.000005
July 30, 2007

AMENDMENTS TO THE CLAIMS:

Please amend claims 15 and 18 as set forth below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-14 (CANCELED).

Claim 15. (CURRENTLY AMENDED). A method for forming a plastic container for packaging a hot-filled food product, comprising:

selecting at least one polymer for a plastic container;

heating the polymer; and

forming the container from the heated polymer;

wherein the plastic container comprises:

a mouth; and

a body cavity formed from a bottom surface and a container wall between the mouth and the bottom surface,

wherein the bottom surface of the container is formed to consist of an arcuately curved surface contiguous to a concentric ring, wherein both sides of the entire curved surface are concave ~~is convex~~ to the body cavity when viewed from the outside of the container and the concentric ring is proximate to both the curved surface and the container wall, wherein further the concentric ring is ~~substantially~~ planar between the curved surface and the container wall,

wherein further the ~~convex~~ curved surface is formed such that it flexes inward toward the body cavity of the container upon filling and sealing the container with a hot-filled food product at temperatures of about 160°F to about 200°F and the subsequent formation of a pressure differential between the interior of the sealed container and atmospheric pressure of about 2.5 psi to about 10 psi, and maintains that configuration following cooling of the hot food product, and

wherein further the container wall is formed such that it withstands buckling upon filling and sealing the container with hot-filled food product at temperatures of about 160°F to about

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200°F and the subsequent formation of a pressure differential between the interior of the sealed container and atmospheric pressure of about 2.5 psi to about 10 psi, and maintains that configuration following cooling of the hot food product.

Claim 16. (CANCELED).

Claim 17. (ORIGINAL). The method of claim 15, wherein forming the container comprises extrusion, vacuum forming, injection molding, blister packaging, melt phase forming or blow molding.

Claim 18. (CURRENTLY AMENDED). A method of manufacturing a plastic container with a selectively deformable surface, comprising:

selecting at least one polymer;

heating the at least one polymer to its VICAT temperature; and

thermoforming a container from the heated polymer;

wherein the plastic container comprises:

a mouth; and

a body cavity formed from a bottom surface and a container wall between the mouth and the bottom surface,

wherein the bottom surface of the container is formed during thermoforming but before filling with hot food product and sealing to consist of an arcuately curved surface contiguous to a concentric ring, wherein both sides of the entire curved surface are concave ~~is convex~~ to the body cavity when viewed from the outside of the container and the concentric ring is proximate to both the curved surface and the container wall, wherein further the concentric ring is ~~substantially~~ planar between the curved surface and the container wall,

wherein further the ~~convex~~ curved surface is formed during thermoforming such that it flexes inward toward the body cavity of the container upon filling and sealing the container with a hot-filled food product at temperatures of about 160°F to about 200°F and the subsequent formation of a pressure differential between the interior of the sealed container

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and atmospheric pressure of about 2.5 psi to about 10 psi, and maintains that configuration following cooling of the hot food product, and

wherein further the container wall is formed during thermoforming such that it withstands buckling upon filling and sealing the container with hot-filled food product at temperatures of about 160°F to about 200°F and the subsequent formation of a pressure differential between the interior of the sealed container and atmospheric pressure of about 2.5 psi to about 10 psi, and maintains that configuration following cooling of the hot food product.

Claim 19. (ORIGINAL). The method of claim 18, wherein the thickness of the container walls decreases from a point substantially at the mouth to a point substantially at the bottom surface.

Claim 20. (CANCELED).

Claim 21. (PREVIOUSLY PRESENTED). The method of claim 18, wherein the circumference of the mouth is greater than the circumference of the bottom surface.

Claim 22. (ORIGINAL). The method of claim 21, wherein the plastic comprises a plastic suitable for solid phase pressure forming.

Claim 23. (ORIGINAL). The method of claim 22, wherein the plastic further comprises polypropylene.

Claim 24. (ORIGINAL). The method of claim 23, wherein the plastic further comprises a barrier enhancement agent.

Claim 25. (ORIGINAL). The method of claim 24, wherein the barrier enhancement agent comprises ethylene vinyl acetate-vinyl alcohol.

Claim 26. (PREVIOUSLY PRESENTED). The method of claim 25, wherein the plastic further comprises an adhesive suitable for solid phase pressure forming.

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Claim 27. (PREVIOUSLY PRESENTED). The method of claim 26, wherein the adhesive comprises an antioxidant

Claim 28. (PREVIOUSLY PRESENTED). The method of claim 22, wherein the plastic container is formed from a plastic sheet comprising up to about 15 volume % ethylene vinyl acetate-vinyl alcohol and about 80 to about 90 volume % polypropylene.

Claim 29. (PREVIOUSLY PRESENTED). The method of claim 18, wherein the plastic container is formed from a plastic sheet having one or more layers, and wherein further the thickness of the container walls are about 70-80 volume % of the thickness of the plastic sheet at a location substantially adjacent to the container mouth and about 20-40 volume % of the sheet at a location substantially adjacent to the bottom surface, and the thickness of the bottom surface is about 15-20 volume % of the thickness of the plastic sheet.

Claim 30. (PREVIOUSLY PRESENTED). The method of claim 29, wherein the container wall thickness uniformly decreases from a location substantially adjacent to the container mouth to a point substantially adjacent to the bottom surface.

Claim 31. (PREVIOUSLY PRESENTED). The method of claim 30, wherein the container walls are about 0.7 mm thick at a location substantially adjacent to the container mouth and about 0.28 mm thick at a point substantially adjacent to the bottom surface, and the thickness of the bottom surface is about 0.16 mm.